IBExU Institut für Sicherheitstechnik GmbH
An-Institut der TU Bergakademie Freiberg

[1] EU-TYPE EXAMINATION CERTIFICATE - Translation

[2] Equipment or protective systems
intended for use in potentially explosive atmospheres, Directive 2014/34/EU

[3] EU-type examination certificate number **IBExU18ATEX1145 X** | Issue 0

[4] Product: **DC holding solenoid**
Type: eD1475

[5] Manufacturer: W. Vershoven GmbH Elektrotechnik

[6] Address: Riedingerstraße 10
45141 Essen
GERMANY

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] IBExU Institut für Sicherheitstechnik GmbH, Notified Body number 0637 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the essential health and safety requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential test report IB-18-3-0043.

[9] Compliance with the essential health and safety requirements has been assured by compliance with:
EN IEC 60079-0:2018 EN 60079-7:2015 EN 60079-18:2015+A1:2017 EN 60079-31:2014
except in respect of those requirements listed at item [18] of the schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule to this certificate.

[11] This EU-type examination certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:

Ⓔx II 2G Ex eb mb IIC T6 Gb
Ⓔx II 2D Ex tb IIIC T73°C Db

IBExU Institut für Sicherheitstechnik GmbH
Fuchsmühlenweg 7
09599 Freiberg, GERMANY

By order

A. Henker

Dipl.-Ing. (FH) A. Henker

Zertifizierungsstelle Explosionsschutz IBExU Institut für Sicherheitstechnik GmbH * Kenn-Nr. 0637 *
Seal
(Notified Body number 0637)

Tel: + 49 (0) 37 31 / 38 05 0
Fax: + 49 (0) 37 31 / 38 05 10

Freiberg, 2019-03-12

[13] **Schedule**

[14] **Certificate number IBExU18ATEX1145 X** | Issue 0

[15] **Description of product**

The DC holding solenoid type eD1475 is used for fixing fire and smoke protection doors. The solenoid is operated with 24 V DC and implemented in type of protection "m" (encapsulation). The rear of the magnet is integrated in a cast iron housing, which serves both for heat dissipation and for electrical connection. The frontal part of the solenoid with encapsulated winding is uncovered; the compound is part of the external enclosure. The terminal compartment is implemented in type of protection "e" (increased safety). Electrical connection is realized in conjunction with separately certified cable glands. In addition, the solenoid is dust-tight and meets the requirements of type of protection "t" (dust ignition protection by enclosure).

Types:

- Type eD1475/5 — solenoid Ø50 mm
- Type eD1475/7 — solenoid Ø70 mm

Technical data:

- Nominal voltage: 24 V DC ± 10 %
- Nominal current: max. 125 mA
- Nominal power: max. 3 W
- Relative duty cycle: 100 %
- Ambient temperature: -20 °C…+40 °C

[16] **Test report**

The test results are recorded in the confidential test report IB-18-3-0043 of 2019-02-28.

The test documents are part of the test report and they are listed there.

Summary of the test results

The DC holding solenoid type eD1475 complies with the requirements of explosion protection for electrical equipment of group II, category 2G and 2D, in type of protection increased safety "e", encapsulation "m" and dust ignition protection by enclosure "t" for Group IIC, temperature class T6, as well as Group IIIC with a maximum surface temperature T73°C.

[17] **Specific conditions of use**

1. The test of resistance to impact in accordance with EN 60079-0, clause 26.4.2 at the compound surface was conducted with reduced impact energy (4 J) for low risk of mechanical danger. Thus, the solenoid must be installed in a way that the compound surface is exposed to a low level of mechanical hazard only.
2. A fuse corresponding to the rated current (max. 3 x I_B according to IEC 60127) or, respectively, a motor protective switch with short circuit and thermal rapid release (corresponding to the rated current) has to be connected in series to each solenoid.
3. The permissible ripple of the DC supply voltage is max. 20 %.

[18] **Essential health and safety requirements**

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report:
None

[19] **Drawings and Documents**
The documents are listed in the test report.

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Freiberg, 2019-03-12